



## ATTACHMENT A

### Clean Replacement Paragraphs

At the following locations, replace the previously provided paragraph with the following clean paragraphs and insert the new sequence listing.

#### **Pages 5-6, paragraph no. [0022]:**

A2 [0022] Referring now to Figure 1, a double standard DNA sequence, denoted 10 and having a sense strand sequence of SEQ ID NO: 1, is shown which comprises a microsatellite locus 12. DNA sequence 10 is a basic sequence used for illustrative purposes and is used to simplify the explanation of the present invention.

#### **Page 6, paragraph no. [0023]:**

A3 [0023] Microsatellite locus 12 (SEQ ID NO: 2) is composed of five copies of CA (SEQ ID NO: 3) nucleotide motif sequence 14. Unique DNA sequences (i.e. non-motif, repeating sequences) flank both the 5' and 3' ends of the microsatellite locus 12. In the example illustrated, DNA sequence TCGAGGGTATCATGTT (SEQ ID NO: 4) flanks the 5' end and DNA sequence GTTAGGG (SEQ ID NO: 5) flanks the 3' end of microsatellite locus 12.

#### **Page 6, paragraph no. [0025]:**

A4 [0025] In general, DNA is composed of two antiparallel complementary strands. During DNA synthesis primed by primer 9 (SEQ ID NO: 6) in this example, the upper strand is displaced and the lower strand is used as template with the complement ( C pairs with G; A with T) of each base of the lower strand being sequentially added

thereby synthesizing a new upper strand in the 5' to 3' direction. A dideoxy DNA sequencing reaction is prepared using DNA template 10. The sequencing reaction includes a primer, and the four deoxynucleotide triphosphates, dATP, dCTP, dGTP, and dTTP. In addition, the sequencing reaction includes dideoxy ATP (ddATP). The primer is labeled with a fluorescent tag, but could also be labeled by other means (e.g., radioactive tag, IR tag, etc.). The sequencing reaction is allowed to proceed (as indicated by arrow 16) to synthesize a two nucleotide ladder DNA size standard denoted 18.

---

**Page 7, paragraph no. [0029]:**

**[0029]** At the conclusion of the DNA sequencing reaction, DNA size standard 18 is produced. DNA size standard 18 comprises five DNA fragments 20, 22, 24, 26 and 28 (SEQ ID NOS: 7-11, respectively) formed of the primer, 5' flanking sequences and two to five copies of motif sequence 14, respectively. As shown, DNA fragments 20, 22, 24, 26 and 28 are 18, 20, 22, 24, and 26 nucleotides in length, respectively.

---